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Transcript

Autonomous Technologies: A Force for Good?

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AUTONOMOUS TECHNOLOGIES: A FORCE FOR GOOD?

Patricia Lewis:

Welcome, everybody. My name is Patricia Lewis, I'm the research director for international security here at Chatham House. It's my great pleasure to host this event this evening. We're going to be talking about autonomous technologies, and I will certainly leave it to our speakers to explain that term in more depth. The question is: will these autonomous technologies be a force for good?

We have two fantastic speakers with us tonight. Before I introduce them, I want to say that this event is on the record – it is not under the Chatham House Rule. We do have a Twitter hashtag, #CHEvents, as per normal for all of the Chatham House events that are on the record. Each of the speakers is going to speak for 10 to 12 minutes or so and then we'll open up the floor for questions for the remainder of the hour.

First of all I'm going to introduce Charles Blanchard, who served as general counsel and chief ethics officer for the US Air Force from 2009 to 2013. In 2003, he served as interim homeland security director for former Arizona Governor Janet Napolitano, and has been a two-term member of the Arizona State Senate. He served as general counsel in the US Department of the Army. He served as chief counsel to the White House Office of National Drug Control Policy. He's currently a partner in Arnold & Porter's Washington, DC office and is a member of the government contracts and national security practices.

To my left is Jody Williams, who founded the International Campaign to Ban Landmines in 1992. As a result of her and all of her colleagues' efforts, an international treaty banning anti-personnel landmines in 1997. Jody was awarded the Nobel Peace Prize for her work in this campaign in the same year. She remains a campaign ambassador for the International Campaign to Ban Landmines. She is chair of the Nobel Women's Initiative, which she established in 2006, along with Dr Shirin Ebadi of Iran, and contains a number of Nobel Prize winners who are women. It works for women's causes and for peace around the world. She holds the Sam and Cele Keeper Endowed Professorship in Peace and Social Justice at the University of Houston, where she has been teaching since 2003.

First of all, Charles, I'm going to turn to you. You're going to tell us what autonomous technologies are and whether or not you think they may or may not be a force for good.

Charles Blanchard:

We've been focused, in this conference, on the use of autonomous technology as weapons. I want to preface my remarks by saying that I believe war is a human failing, and I don't think of any weapon, even if it's necessary, to be a force for good. But it's in the larger context of autonomy, which are greatly improved computer systems that outside the military context can have great value – including some pretty amazing technologies that could result in better medicine, better search and rescue, a variety of different resources.

So what are autonomous technologies and what is their application in a warfare environment? Autonomous technologies really are computer systems that can effectively engage in a wide variety of conduct without any human intervention. A human turns them on; they run, they do their thing, without any human intervention. In the context of autonomous weapons, this means weapons systems that you can deploy in a battlefield that can make its own targeting decisions, and make the decision to engage or not engage with that weapons system.

So I want to focus on some of the legal issues that arise from the deployment of autonomous weapons systems. Again, these are systems that you turn them on, put them in the battlefield, and they make decisions: who to target, what to direct, and to actually engage with the target without any human being involved in the system. That's what we mean by autonomous weapons systems.

In this area of war, any weapons system has to meet – before you engage a target using a weapons system, any use of a weapons system requires that you meet certain requirements for international law. I don't want to turn this into a long lecture on international law, so I'm going to give the headlines. Happy in discussions to talk about other issues. But largely, what international law says is that any weapon can only be used to target a legitimate military target; and even after you have chosen that target, you have to take steps to minimize civilian casualties. The final step is that if you are going to use a weapon and you've decided that you know what the likely civilian casualties are going to be and you've minimized them, you then need to make a judgment about whether the value of the target justifies the civilian deaths that can occur. It's proportionality: if it's a very low value military target, few if any civilian casualties can often be justified; if it's a very high value target, more civilian casualties can be justified. It's a judgment call, but it's proportional.

We had a discussion earlier and I gave the opinion – I'll give it now again – in most circumstances, under existing technologies, my judgment (with a few

caveats that I'll go into) is that the use of most autonomous weapons systems in most battlefields cannot comply with these international legal requirements. Either they cannot adequately distinguish between military targets and civilian targets – the technology is not there yet – or they cannot make the proportionality judgment, which really is a judgment call, and so cannot be useful or effective in the battlefield.

But that's now. That's the technology as it now exists. As my colleague will describe, there are a lot of issues that may even arise after you determine that the technologies can comply with international law.

I said there were some caveats. The caveats I want to give are: there are some systems I can imagine that in some circumstances civilians are not going to be present, such that the use of these weapons can be justified under international human rights law. Let me give you some examples. Right now we have missile defence systems on our destroyers, called the Aegis systems. Right now there is a human on the loop, a human being supervising the use of the machine. But let's imagine that we had an Aegis destroyer that was in the middle of the ocean, that was fully autonomous. This is something that we could do. Would that comply with international law? In those circumstances I think it probably could, because you're in a space where there are no civilians; it targets not human beings but missiles; and therefore the issues of distinction and proportionality that I talked about really don't come into play. You can also imagine in the near future, as the technology gets better, there are other parts of the battlefield where the threat to civilians is low enough that this issue will become alive sooner rather than later. One of the best examples is undersea, anti-submarine warfare. Given that submarines under water are, with a few exceptions, largely only a military activity – there aren't many people going on cruises in submarines, it really is a military environment – a weapon that only targets submarines, and as the technology gets good enough they will only target submarines and not other things underwater, could potentially comply with international law, because it's operating in an environment where there are no civilians. The final example I will give, which may be rare now but in the past hasn't been, would be desert tank warfare, where you're talking about anti-tank weapons only. Again, in an environment where it's highly unlikely that many civilians will be present and is clearly targeted toward military targets.

But right now in the environments and kinds of battles that we're now fighting in Afghanistan and have fought in Iraq – counterinsurgency, urban warfare – as you can imagine, the issues become even more challenging. You're in an environment where the enemy may not wear a uniform, an environment

where perfectly law-abiding citizens who are not involved in the insurgency routinely carry weapons. An environment where you may have one element that is involved in a conflict with the United States or Great Britain while another element may not be. So a messy battlefield, intermixed with lots of civilians. It's a net environment where I think we're years away from being an effective use of autonomous weapons systems.

So that's the landscape as I see it now, where I think we effectively have, by application of traditional principles of international humanitarian law, a ban or a prohibition or a moratorium that may go away as the technology gets better, but right now that effectively exist for most offensive uses of autonomous weapons systems. But that could change as the technology gets better. In my view, that then raises the fundamental question: if we reach a time when these weapons systems are able to comply with international law – they can distinguish who a civilian is, who a military member is; they have a method of making the proportionality analysis – are there other reasons that we would nonetheless want to ban these weapons? They would not be banned under international humanitarian law, but there may be other values at stake that come into play.

With that, I'll stop and let Jody talk, and I look forward to your questions.

Jody Williams:

I agree with Charles that war is an incredible failing of human beings. I also think that the mad clamour for turning anything new, any new technology, into some military use – to further dehumanize war – is a horrific human failing. That we sit back and accept it is another human failing.

I'm going to talk a little personally about what we in the Campaign to Stop Killer Robots are trying to accomplish, and why. Some years ago I wrote an article about the CIA, the mercenaries that the United States of America uses, and the US Army and the use of drones illegally in extrajudicial execution. In that process I learned about these new technologies in which at some point in time, if undisturbed, would become fully autonomous weapons of war. Drones pose their own issues, and I have issues with drones. But you have to think about a drone. At the very least, there is a human being that makes the target and kill decision. The drone can fly for thousands of miles relatively on its own but it cannot on its own home in on you and decide, oh, there's a terrorist, and kill you. There's a human being having to look, to make some sort of assessment – and we can argue whether or not the assessments are accurate – and has to kill you. But the human being has to do the killing.

That already causes people huge emotional issues. I don't say that in a girly way, like, 'oh my god, we can't stand this'. It's the dehumanization of war. It's the ability of technologically advanced – whatever that means – in war nations to keep their people away from the conflict itself and inflict lethal damage on another people. Some of us believe that is profoundly wrong. Taking the next step to removing the human being from even looking at the computer screen or pushing the buttons to fire the missiles to kill you, is a step that humanity must not take. One of the things that I noted in the conversations today – there are a lot of people who actually develop these weapons and some military lawyers. As you know, Shakespeare said, 'Kill the lawyers first', but I won't elaborate on that. It was a really fascinating discussion. But what did not get discussed is the ethics and morality of making the choice – because it is a choice – to allow, to cede the power of life and death to machines. Instead there was conversation about – and I certainly believe in the laws of war, because it was based on the laws of war that we were able to ban anti-personnel landmines and subsequently cluster munitions. I am a firm supporter of the laws of war. But I don't think that fully autonomous robots that can kill you is really fundamentally an issue of the laws of war. I think it is a profoundly moral and ethical issue that we have to, as a people, address.

That was the conversation that ultimately led to a group of nine organizations coming together and deciding to create a campaign to stop killer robots. That we should raise alarm bells, that we should help inform the public that these weapons are being developed in our name. I firmly believe that the military did not expect this to become a public issue. I think they and the developers expected it would just kind of go along and everything would be nice and the development would continue, and then suddenly we'd hear, after these weapons had been used in some war – oh by the way, we have these weapons. We do not agree that that is the way we should go.

Obviously, since we have worked very hard on banning landmines and banning cluster munitions, and the new Arms Trade Treaty, we firmly believe in the concept of humanitarian disarmament. We firmly believe that everybody in a society has the right and the responsibility to participate in discussions about this, instead of just letting the military and the government say they're protecting your security. Wait a minute, that's not my definition of security. Spending billions of dollars on technology that may or may not work is not making me a safer human being on this planet. While the poverty rate in my country goes up, while the public school systems fall apart, we're perfectly willing to spend billions of dollars on weapons and not on the needs of humanity. That's a human failing.

So we created the international Campaign to Stop Killer Robots. Within eight months – we launched in April last year, here in London as a matter of fact – within about eight or nine months we had raised the profile enough that governments have started discussing killer robots. There will be discussion under the banner of the Convention on Conventional Weapons – I won't bore you with the details of that convention, that treaty. But there will be discussion in May in Geneva and we will be there, putting forth our position, because we believe it is a moral and ethical step that we cannot take.

My country likes to talk about – and I'm an American, so I'm going to talk from an American perspective, since we (along with Israel and the UK) are the primary leaders, if you will, in the development of these technologies. The US likes to talk a lot about a bloodless battlefield. What does that mean? The bloodless battlefield is that US pilots at this point sit in Nevada and kill people in Somalia, in Yemen, in Pakistan. I'm not sure where else. They did in Libya, they were used. What is bloodless, it is for the American people, so they do not have to see their own people come home in body bags and raise discussions about war. It is not a bloodless battlefield. It would be a system of war that so imbalances the ability of the so-called enemy to fight back that it really defies thinking. It makes me worry about the future of humanity, if we step to that point where we think it's okay to give a machine the ability to kill you. I don't care how much it might help in one battle, in the middle of a desert – I don't care. Because once those weapons systems are deployed, the slippery slope will happen and they will be used in other circumstances, because it's useful.

We do not want to see that happen. We keep being told: oh my god, you're going to affect dual-use technology. Oh my god, we don't know yet what we can do with these weapons so a ban is premature. I don't want to know what we can do with these weapons. I want to ban now so that we do not have to contemplate machines that can kill on their own.

We are not anti-technology. We are not against robots. They're fine. What we are against is the use of robotic systems to create weapons that can kill you on their own. We're not necessarily against some robotics weapons systems. We are against lethal robotics systems that can kill you on their own, with no soldier involved. That's what we want to ban. We don't want to stop research into artificial intelligence. If Google wants to have a car that can drive on its own, go for it. If Amazon wants to deliver my books by its own little drone helicopter, I just don't want them to drop it on my head. That is not what we're particularly concerned about. We are concerned about weapons that continue to dehumanize war and make it easier and easier for the technologically

advanced nations of the world to kill people who don't have the same technology. That is morally and ethically wrong, and to extract the morality and the ethics from the discussion is also wrong.

Yet when activists and campaigners like myself want to talk about morality and ethics in the development of weapons systems, it's like, oh, listen to her. She gets all emotional. Because I speak with passion about my belief that we should not cross this moral and ethical line does not mean I'm emotional. It means that I am appalled that mostly men – I'm really sorry, gentlemen – mostly men sit in Washington and in the defence industry, funded by billions of US taxpayer dollars, think up these machines and think they're cool. I have seen quotes about people in the development of these robotic systems thinking they are just so cool. There is nothing cool about creating more weapons that keep a few people safe while they kill people who have very little alternative, that kill people who have no chance of surrender. One of the big issues about the use of drones is, what if one of those people that's targeted wanted to surrender? They are judged, killed, immediately. There is no chance of surrender. We won't even go into the 30-some-odd people that were killed at a wedding ceremony in Yemen recently. Because there's not collateral damage, because precision is the name of the new technology.

One of the horrors of war today is the constant belief that we can find the precise technological solution to our problems. We cannot. War, as Charles said, is a failure of human beings. It is a lust for power and resources and greed. That will never be resolved by killer robots. It will only be resolved when we as a teeny, and getting teenier, world start thinking differently about how we resolve our problems. That is not a utopian hoo-hoo. You get what you prepare for. If we keep preparing more and more sophisticated weapons to go kill people, we're just going to get more and more war that's easier to go to. That is another huge concern about robotic weapons. Already, I believe, we in my country have been able to attack Somalia, Yemen, Pakistan because there aren't boots on the ground. What would we do if we didn't have drones? Would we send people in there? Would we send platoons of army people in there? Imagine the day when we have huge weapons systems that are fully autonomous and nobody has to think about it at all.

Thus, we created the Campaign to Stop Killer Robots. We will be doing more. We are engaging in expanding our campaign, engaging in more public discussion like this, so that people are aware, so that people exercise their responsibility, so that people exercise their individual power and take a stand on what you want done in your name, with your money. Because by the way, the UK is right up there. The Taranis system is a precursor of a fully

autonomous, supersonic super-drone. That's your tax dollars. To say nothing about Trident missiles, but I won't go into the nuclear question at this point. Although I could.

I'm going to read you a line from an article called 'The Rise of the Machines: Why Increasingly Perfect Weapons Help Perpetuate Our Wars and Endanger Our Nation'. It is written by Lieutenant-Colonel Douglas Pryer, active-duty US Army. He was a military intelligence officer – he's still active-duty – who has served in Iraq, Kosovo, Germany, the UK, the United States and most recently, Afghanistan. So I kind of feel like he knows of what he speaks. He's talking mostly about drones here, but we communicate, and I asked him if what he wrote here was equally applicable to killer robots. He wrote back and said: absolutely, yes.

This is what he writes about the dehumanization of war and the impact on my own country, but it would be similar for others. 'Some of us are not only dehumanizing others as evil terrorists in order to justify our use of these weapons, but all Americans are being dehumanized in the process. The face that America shows her enemies, shows foreign populations and shows coalition allies in these countries where the US patrols exclusively with armed drones, is a wholly inhuman face. Our enemy hides from and occasionally fires at machines. Our enemy, who is at war with America, is at war with machines. America, home to a proud, vibrant people, has effectively made itself inhuman. Such wilful self-dehumanization is tantamount to a kind of slow moral suicide, motivating our enemies to fight and prolong our current wars. It is troubling just how financially, politically and militarily committed my nation is to a course of action that encourages the very worst of human impulses'.

I'm proud that an active-duty lieutenant-colonel in the US Army would say this publicly. You can find it in the *Military Review*, March/April 2013. I fully agree with him that if we proceed along this path in my country or globally, we are further dehumanizing war. It is immoral and unethical. I can assure you that the Campaign to Stop Killer Robots will do everything we can to stop killer robots, in all circumstances. No offence – I like you, Charles. I don't always like your position.